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“DrinkThink” Alcohol Screening and Brief Intervention for Young People: a qualitative evaluation of training and implementation

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ABSTRACT

Background Alcohol Screening and Brief Intervention (ASBI) helps reduce risky drinking in adults, but less is known about its effectiveness with young people. This paper explores implementation of DrinkThink, an ASBI co-produced with young people, by health, youth, and social care professionals trained in its delivery.

Methods A qualitative evaluation was conducted using focus groups with 33 staff trained to deliver DrinkThink, and 8 interviews with trained participants and service managers. These were recorded, transcribed and a thematic analysis undertaken.

Results DrinkThink was not delivered fully by health, youth or social care agencies. The reasons for this varied by setting but included: the training staff received, a working culture that was ill-suited to the intervention, staff attitudes towards alcohol which prioritised other health problems presented by young people, over alcohol use.

Conclusions Implementation was limited because staff had not been involved in the design and planning of DrinkThink. Staffs' perceptions of alcohol problems in young people and the diverse cultures in which they work were subsequently not accounted for in the design. Co-producing youth focused ASBIs with the professionals expected to deliver them, and the young people whom they target, may ensure greater success in integrating them into working practice.

Key words: alcohol screening and brief intervention, co-production, implementation, facilitators and barriers

INTRODUCTION

Young people in the United Kingdom (UK) report some of the highest rates of heavy drinking in Europe [1, 2]. High intensity or binge drinking throughout adolescence is associated with numerous adverse health behaviours and outcomes, including anti-social behaviours and risky sexual practices [3-6]. English Chief Medical Officer Guidance [7] advises no alcohol consumption for those under 15 years of age, and no more than one day of alcohol consumption per week in young people aged 15-17 years, if at all. There have been some population level reductions in alcohol consumption among young people over the last 13 years [8, 9], but this has not been universal in terms of adherence to the recommended limits. Patterns of alcohol use among the young remain a public health and policy concern [10, 11].

Alcohol Screening and Brief Intervention (ASBI) has been developed primarily for use with adults but also young people attending primary care, college, or school settings; predominantly among higher age ranges of 18-25 [12-17]. There is little evidence to date on the effectiveness of ASBI delivered to young people in social care settings and those aged less than 18 years [13, 18-24]. Evidence from ASBIs used with adults in social service settings [25] suggests that expansion into young people's social care services might be appropriate; especially as young people are more likely to use community-based services [26, 27]. One ongoing evaluation of an alcohol screening tool for use with young people in the UK, is the Screening and Intervention Programme for Sensible Drinking (SIPS JR-HIGH) [28], which is assessing the effectiveness of ASBI delivered in schools to prevent hazardous drinking among 14-15 year olds.

In 2009, B&NES council initiated a service led intervention: DrinkThink, an ASBI designed specifically for use with young people with risky alcohol use. Training in DrinkThink is provided by Project 28: a young person's substance misuse service, to professionals working with 14-19 year olds in local health, youth and social care settings (See Box 1). The theoretical underpinning of DrinkThink encompasses motivational interviewing: a client-based approach used to address negative patterns of behaviour [29-31]. DrinkThink aims to support health and community workers identify when and how a young person's drinking might be hazardous and as a service-led initiative, falls within the remit of health, youth, and social care services, rather than specialist alcohol services. The value of ASBI undertaken by non-specialist services and staff is supported extensively in the literature [13, 26, 32-43].

Young people from Project 28 helped design the DrinkThink materials that include a series of flash cards with graphics showing drinking measures and units, a body diagram showing the impact of alcohol, and pictorial images with depictions of situations in which alcohol might pose a risk to young

people.

METHODS

This qualitative paper explores whether DrinkThink is acceptable and being delivered within young people's services, as intended. Two inter-related questions are addressed: 'is the DrinkThink training acceptable to professionals across health, youth, and social care service settings?', and 'is DrinkThink being delivered by professionals from health, youth, and social care service settings as intended?'

Participants

There were 4 participating agencies: a sexual health clinic, school nursing, and 1 youth and 1 social care service. Agencies were selected to ensure a range of settings were represented and staff selected according to their availability and whether they had received the DrinkThink training. Professionals who had received the training from 2013 onwards were eligible for inclusion. Excluded were agencies who had not received the DrinkThink training, or professionals working in adult services.

Focus groups and interviews

Focus groups were conducted with each of the 4 participating agencies and a total of 33 participants, arranged no less than two months after training had been delivered. Each group was organised and run by 2 researchers using a topic guide. Participants were asked open-ended questions about what they thought of the training; the content of the DrinkThink materials; whether they were implementing the DrinkThink intervention; and any views they had concerning the value of the intervention for their work. Opportunities were given to elaborate further on any related themes. The groups were audio recorded and transcribed before being coded.

An additional 8 interviews were conducted after 6 months to provide supporting evidence about why implementation was low; participants included 6 team leaders from the 4 participating agencies and 2 recently trained school nurses (see Table 1.). These interviews were conducted over telephone or email. Additional notes from correspondence, where relevant, and training observations were also included.

Analysis

Thematic analysis was conducted to identify and compare major themes across the different settings [44, 45]. Initial transcripts of verbatim, recorded interviews were scrutinised for themes by two researchers (JK and FF) and a coding frame of those themes devised. Subsequent transcripts were coded and the coding frame adapted or expanded as new themes emerged. All correspondence and meeting notes from other agencies which had not taken part in a focus group, but which had commented on use of Drink Think were also read and content noted where it related to the coding frame themes. JK and FF then developed the higher order interpretive themes based on the final coding frame, through discussion [46]. The additional interviews were conducted by JD and compared against previously identified themes.

MAIN FINDINGS OF THIS STUDY

Most staff participants were using elements of the DrinkThink intervention to conduct informal conversations, but few were delivering it in its entirety. Use of the Modified-Single Screening Question (M-SASQ) was sporadic and most staff relied on their own judgement about whether a young person required the intervention. Failure to implement the intervention in its entirety was due to factors that can be categorised according to three themes: 1) the training; 2) working 'culture'; and 3) participant's attitudes towards alcohol.

Training

Factual knowledge gained through the DrinkThink training was appreciated as it enabled participants to feel more confident; school nurses reported the training helped equip them to initiate conversations about alcohol and that it fitted easily into questions they were already asking about health. Follow-up visits by trainers were also helpful:

"She does it as a reminder to bring it to the top of – because we deal with so many different issues, it depends who is hassling us the most (laughs) at the time." (School nurse, focus group)

Youth and social care participants however, felt unsure about how to practically implement the toolkit, even after training:

"It was a PowerPoint presentation and it went through statistics [...]. And at risk groups we looked at, and we looked at different types of alcohol, different units and effects of

that. And then right at the end we were given the pack. And we kind of looked at it and that was it, wasn't it?" (Youth worker, focus group)

For others, the training helped generate useful discussions about alcohol, but did not help in the delivery of the intervention:

"I mean it's always very different to get training in something and then to use it. So I think the training is, you know, good and it brings up a lot of discussion around young people and alcohol as well, which is always a good thing. But, yeah, looking at it in a reality of using it, can be slightly different, obviously, from receiving the training". (Youth worker, focus group)

Integration within work 'cultures'

Most participants selected the flash cards and body diagram to help initiate conversations about alcohol. Sexual health clinic nurses for example, incorporated elements of the toolkit within their existing assessment, when possible:

"Yeah, I don't tend to give the whole thing to them. It's more about a quick chat and then often giving them the tips, things to do to help with their problems, to take away with them. But quite often they've been in the clinic for a long time and they've come in for various other things - their sexual health, and then it's kind of like, we talk to them about drinking. And some of them will be open to it but a lot of them it's just like, "I want to go now. I've had enough," you know. So it is, it's the timing as well". (Sexual health nurse, focus group)

The complex nature of young people's problems could preclude fuller implementation of DrinkThink. For example, sexual health staff who deliver a 'walk-in' service, found the intervention competed with young people's other pressing health needs:

"But, you know, so much more now we've got domestic abuse, we've got sexual exploitation, we've got –there's so much. You know, we've got our core service and then there is so much that's coming in now that's potentially a knock-on effect. It's just, you know, how do you fit it all in sometimes?" (Sexual health nurse, focus group)

This was later confirmed by a team leader from the sexual health clinic who reported that although staff were positive about DrinkThink, they found allocating the necessary time to complete it, difficult:

“I personally generally find the tool and the use of the brief intervention helpful, but the amount of time spent on this varies based on how busy the clinical session is. This seems to be the general feed-back from the team. You may recall that in addition to taking a full sexual history and doing a full-risk assessment for blood borne viruses, we also need to get medical, medication and allergy details, and enquire about smoking, recreational drug use and abuse – while aiming to fit in all this and the examination and dissemination of results in around 20 minutes, which proves quite an ask”. (Sexual health clinician, interview)

Time was also raised by the school nurses’ manager who reported that while staff appreciated the toolkit, they also had to implement a number of other interventions and DrinkThink had to ‘compete’ with these.

Youth and social care staff described their work culture as ill-suited to the DrinkThink intervention; commenting that it was “stilted” and “educational”. This contrasts with their approach which is non-directive and engages young people according to their individual priorities and needs. A social care team leader described her teams’ approach to addressing alcohol use as opportunistic:

“To pull out a tool such as this in a session would arguably feel more formal than our approach to mentoring tends to be”. (Social care team leader, interview)

“I mean things like the drunk glasses, kids wearing drunken glasses is more interesting and engaging than the questionnaire [...]. They remember it, it’s quite experiential rather than academic. (Youth worker, focus group)

Youth and social care staff also noted practical barriers to the delivery of DrinkThink. Working in mobile settings, or other informal venues meant staff did not always have the DrinkThink materials with them, or that the venue was unsuitable. Youth workers discussed digital ‘apps’ as an easier tool to use in mobile settings:

“I haven’t got anywhere that I can easily access it, the actual cards and things. If I had like a smart phone app or something, if I had a smart phone rather than a tablet that I’ve got to put 48 passwords in to get in[...] But if I could just do that and just whiz through it, that would be really useful”. (Youth worker, focus group)

Attitudes

Participants did not always perceive alcohol to be a significant problem among young people they saw. A youth team leader reported that of 20 new referrals received that month, only one was identified as having an alcohol problem. Other participants compared alcohol with other drug use, especially marijuana (“weed”):

“I have to say, in terms of alcohol use, I really haven’t met a young person yet that I’ve worked with where there has been real concerns about their alcohol use. Here it’s more about smoking weed”. (Youth worker, focus group)

Recent trends showing a reduction in alcohol use among young people ~~was~~ were influential in shaping staffs’ views, implying that training had no impact on their views concerning the continued risks:

“I’m surprised how little they drink, to be fair. Because I just think, I grew up in a bit of a drinking, eighties culture - I’m expecting them to be drinking far more, and I’m quite pleasantly surprised by their responses. And I think there is a general trend that young people are drinking less. I think they’re all on their screens. They’re not so – there’s nobody drinking cider in the playground, in the parks much”. (School nurse, focus group)

In addition to views held that statistically, young people were drinking less and that marijuana was more of a problem, there was also a lack of clarity about what constituted ‘normal’ and ‘problem’ alcohol use in the general population, whereby drinking alcohol was perceived as a ‘social norm’. Several related their own experiences and distinguished ‘normal’ experiences of alcohol use, from alcohol use that leads to risky sexual practices:

“I think it’s the norm that young people go to uni or college and they go out and they drink. And I’ve done it, and most people have done it, and it’s just normal. But obviously then there’s the other side where they are having all these unpleasant sexual incidents, which I didn’t do. So that’s where you need to be picking up, then”. (Sexual health clinic nurse, focus group)

“I think equally it is the norm[...], because that is the norm: drinking and having sex is unfortunately the norm these days”. (Sexual health nurse, focus group)

Alcohol was often evaluated in relation to other problems young people had. For example, a youth team leader reported that in her service, alcohol problems ranked behind mental health problems,

domestic violence, and drug use. Sexual health nurses saw their role as to address the sexual health needs of young people; drugs and alcohol were less of a priority:

“I think we have to remember what we’re here for, and that’s to provide a service of sexual health screening and dealing with people’s problems. Yes OK, alcohol could be a contributory factor to it, so that’s important. But they actually want what they’ve come here for. And not to harangue them about the fact that they partied all night last week or whatever”. (Sexual health clinic nurse, focus group)

In contrast, youth and social care teams reported routinely addressing alcohol use among young people, but according to their specific therapeutic aims and again, approach:

“(There’s) nothing wrong as such with the [DrinkThink] model. Our mentors tended to work in a person-centred, informal way with their mentees and be led by the mentees conversation. E.g. they’d talk about drinking if that arose in a mentoring conversation, and be led by their mentees wish to talk or not around it”. (Youth team leader, interview)

DISCUSSION

Main findings of the study

DrinkThink, an ASBI designed to be used with young people, was not delivered as planned by health, youth, or social care staff. There was a general perception that alcohol was less of a problem among young people than either drug use or risky sexual practices. Work demands and the unsuitability of ASBI to the work culture of youth and social care services were also cited as barriers. Linked with this, some staff reported they already routinely address alcohol, using their own informal approaches. Most staff prioritised health issues according to the demands of their service and the types of problems presented by young people. Failure of the DrinkThink intervention can be attributed to a lack of appreciation of this diversity and the complex health issues presented. This was in part, due to lack of involvement of staff at the planning stage of DrinkThink. Issues concerning the different working cultures, time constraints impacting implementation, and staff’s attitudes to alcohol could have been addressed earlier and additionally, influenced the design of the training.

What is already known on this topic

ASBI has been recommended for adults [27, 36, 51-53] and is currently under development for use with young people [28]. Secondary alcohol prevention work with young people under the age of 18 years is a less common approach than among adults [54]. Community-based agencies are more likely to see young people with health-related problems [8, 55, 56] and are therefore crucial to the delivery process [23].

However, the literature highlights several challenges in relation to secondary prevention in alcohol use. Healthcare professionals who perceive alcohol as a social 'norm', has meant that in some instances alcohol is not being addressed with patients [57-60]. For example, some professionals are fearful of damaging their relationship with patients [32, 43, 61-64]. Attitudes about role legitimacy, adequacy, and motivation towards addressing alcohol use, shows that staff can feel inadequate in providing what is sometimes viewed as a 'specialist' service [65]. These difficulties have been addressed in part, through the Short Alcohol and Alcohol Problems Perception Questionnaire (SAAPPQ) [66]. Additionally, the literature shows that structural constraints can limit effective implementation, especially high workloads against high expectations of the service and commissioners [67-69].

What this study adds

Public health interventions increasingly utilise co-production approaches in health programmes, but often with mixed results [70-73]. Findings from this study highlight the diversity of working environments and show that the absence of professionals at the planning and design stage of an intervention can have severe repercussions on outcomes. This study also emphasises the challenging nature of young people's experimental risk taking, such as; binge drinking, drug use, and risky sexual behaviour and consequently, the need for ASBIs to be adaptable to different contexts.

Limitations of this study

Focus groups and interviews with young people were initially intended to be part of the DrinkThink evaluation. However, insufficient young people were exposed to the intervention so our evaluation was limited to the health, youth, and social care professionals who had received training. SIPS JR-High is currently under evaluation [28] and will undoubtedly contribute to an increased understanding about the effectiveness, or otherwise, of ASBIs used with younger age groups.

CONCLUSIONS

ASBIs used with young people in community healthcare settings require a degree of flexibility and adaptability in both design and application. Involvement in the design of interventions from the outset would also enable opportunities to address attitudes of professionals towards alcohol. Co-production remains a challenging area that still lacks clarity in terms of practice; for example, who should be involved and at what stage [47-50]. By grounding an intervention in practice-based understanding of the multi-faceted needs of young people, ASBIs can potentially assist staff to address their complex health needs.

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REFERENCES

1. Hibell B, *et al.* The 2011 ESPAD report substance use among students in 36 European countries. *Stockholm, Sweden: The Swedish Council for Information on Alcohol and other Drugs (CAN)*, 2012.
2. Alcohol dependence and harmful alcohol use full guidelines. National Institute of Clinical Excellence June 2010.
3. Cooper ML, Alcohol use and risky sexual behavior among college students and youth: Evaluating the evidence. *J Stud Alcohol* 2002;(14): 101-117.
4. Hingson RW, Heeren T, Winter MR., Age at drinking onset and alcohol dependence: age at onset, duration, and severity. *Arch Pediatr Adolesc Med* 2006; 160(7): 739-746.

5. Pitkänen T, Lyyra AL, Pulkkinen L, Age of onset of drinking and the use of alcohol in adulthood: a follow-up study from age 8–42 for females and males. *Addiction* 2005; 100(5): 652-661.
6. Measham F, Aldridge J, The turning tides of intoxication: young people's drinking in Britain in the 2000s. *Health Education* 2008; 108(3): 207-222.
7. Youth Alcohol Action Plan, Department of Health June 2008.
www.gov.uk/government/publications/youth-alcohol-action-plan
8. Youthful abandon: why are young people drinking less? Institute of Alcohol Studies July 2016.
9. Statistics on Alcohol, England 2015, Health and Social Care and Information Centre,
10. Advisory Council on the Misuse of Drugs, Annual Report 2006.
11. Miller JW, *et al.* Binge drinking and associated health risk behaviors among high school students. *Pediatrics* 2007; 119(1): 76-85.
12. Borsari B, Murphy JG, Barnett NP, Predictors of alcohol use during the first year of college: Implications for prevention. *Addict Behav* 2007; 32(10): 2062-2086.
13. Botvin GJ, *et al.* Preventing binge drinking during early adolescence: one-and two-year follow-up of a school-based preventive intervention. *Psychol of Addict Behav.* 2001; 15(4): 360.
14. Hansen WB, School-based alcohol prevention programs. *Alcohol Res Health* 1993; 17(1): 54.
15. McBride N, *et al.* Harm minimization in school drug education: final results of the School Health and Alcohol Harm Reduction Project (SHAHRP). *Addiction* 2004; 99(3): 278-291.
16. Wechsler H, Nelson TF, What we have learned from the Harvard School of Public Health College Alcohol Study: Focusing attention on college student alcohol consumption and the environmental conditions that promote it. *J Stud Alcohol Drugs* 2008; 69(4): 481-490.
17. Werch CE, *et al.* Evaluation of a brief alcohol prevention program for urban school youth. *Am J Health Beh* 2000; 24(2): 120-131.
18. Bailey KA, *et al.* Pilot randomized controlled trial of a brief alcohol intervention group for adolescents. *Drug Alcohol Rev* 2004; 23(2): 157-166.
19. Carey KB, *et al.* Individual-level interventions to reduce college student drinking: a meta-analytic review. *Addict Behav* 2007; 32(11): 2469-94.
20. Donovan JE, *et al.* Really underage drinkers: Alcohol use among elementary students. *Alcohol Clin Exp Res* 2004; 28(2): 341-349.
21. Gerrard M, *et al.* A theory-based dual-focus alcohol intervention for preadolescents: The Strong African american Families program. *Psychol Addict Behav* 2006; 20(2): 185.
22. Larimer ME, Cronsce JM, Identification, prevention, and treatment revisited: individual-focused college drinking prevention strategies 1999-2006. *Addict Behav* 2007; 32(11): 2439-68.
23. Stead M, *et al.* Delivery of alcohol brief interventions in community-based youth work settings: exploring feasibility and acceptability in a qualitative study. *BMC Public Health* 2017; 17.
24. Walton MA, . Effects of a brief intervention for reducing violence and alcohol misuse among adolescents: a randomized controlled trial. *Jama* 2010; 304(5): 527-535.
25. Schmidt CS, *et al.* Brief Alcohol Interventions in Social Service and Criminal Justice Settings: A Critical Commentary. *Brit J Soc Work* 2014; 45(3): 1039-1049.
26. Knight J.R, *et al.* Validity of brief alcohol screening tests among adolescents: a comparison of the AUDIT, POSIT, CAGE, and CRAFFT. *Alcohol Clin Exp Res* 2003; 27(1): 67-73.
27. Babor TF, *et al.* Screening, Brief Intervention, and Referral to Treatment (SBIRT): toward a public health approach to the management of substance abuse. *Subst Abus* 2007; 28(3): 7-30.
28. O'Neil S, *et al.* Brief intervention to prevent hazardous drinking in young people aged 14--15 in a high school setting (SIPS JR-HIGH). *Trials* 2012 13: p. -.

29. Neighbors CJ, *et al.* Cost-Effectiveness of a Motivational Intervention for Alcohol-Involved Youth in a Hospital Emergency Department. *J Stud Alcohol Drugs* 2010; 71(3): 384-394.
30. Peterson PL, *et al.* Short-term effects of a brief motivational intervention to reduce alcohol and drug risk among homeless adolescents. *PsycholAddict Behav* 2006; 20(3): 254.
31. Emmons KM, Rollnick S Motivational Interviewing in Health Care Settings: Opportunities and Limitations *Am J Prev Med* 2001;20(1), 68-74.
32. Hutchings D, *et al.* Implementing screening and brief alcohol interventions in primary care: views from both sides of the consultation. *Prim Health Care Res Deve*2006;7(03): 221-229.
33. Doi L *et al.* Alcohol brief interventions in Scottish antenatal care: a qualitative study of midwives attitudes and practices. *Pregnancy Childbirth* 2014;14(1),170.
34. Haggard UT, *et al.* , Implementation of a multicomponent Responsible Beverage Service programme in Sweden – a qualitative study of promoting and hindering factors. *Nordic Studies of Alcohol and Drugs* 2014;32(1) doi/abs/10.1515/nsad-2015-0009
35. Bernstein E, *et al.* A preliminary report of knowledge translation: lessons from taking screening and brief intervention techniques from the research setting into regional systems of care. *Acad Emerg Med* 2009; 16(11): 1225-33.
36. Bertholet N, *et al.*, Reduction of alcohol consumption by brief alcohol intervention in primary care: systematic review and meta-analysis. *Archives of internal medicine* 2005; 165(9): 986-995.
37. Clifford A, Shakeshaft A, Deans C How and when health-care practitioners in Aboriginal Community Controlled Health Services deliver alcohol screening and brief intervention, and why they don't: a qualitative study. *Drug Alcohol Rev* 2012; 31(1): 13-9.
38. Giles E.L, *et al.* Development of a multicentre randomised controlled trial of screening and brief alcohol intervention to prevent risky drinking in young people in a high-school setting (SIPS JR-HIGH). *The Lancet* 2015; 386:. S37.
39. Grant S, *et al.* Reviewing and interpreting the effects of brief alcohol interventions: comment on a Cochrane review about motivational interviewing for young adults. *Addiction* 2015.
40. Hides L, *et al.* Feasibility and outcomes of an innovative cognitive-behavioural skill training programme for co-occurring disorders in the youth alcohol and other drug (AOD) sector. *Drug Alcohol Rev* 2007; 26(5): 517-23.
41. O'Neill G, *et al.* Can a theoretical framework help to embed alcohol screening and brief interventions in an endoscopy day-unit? *Frontline Gastroenterol* 2016; 7(1): 47-53.
42. Strom, HK *et al.* Effectiveness of school-based preventive interventions on adolescent alcohol use: a meta-analysis of randomized controlled trials. *Subst Abuse Treat Prev Policy* 2014; 9: 48.
43. Vadlamudi RS., *et al.* Nurses' attitudes, beliefs and confidence levels regarding care for those who abuse alcohol: impact of educational intervention. *Nurse Educ Pract* 2008; 8(4): 290-8.
44. Braun V and Clarke V Using thematic analysis in psychology. *Qual Res Psychol* 2006; 3(2): 77-101.
45. Charmaz K. Constructing Grounded Theory: A Practical Guide Through Qualitative Analysis. 2006, London: SAGE.
46. Glaser BG. Grounded Theory: Strategies for Qualitative Research. 1967, AldineTransaction.
47. David Boyle and Michael Harris. The Challenge of co-production: how equal partnerships between professionals and the public are crucial to improving public services. London: NESTA/NEF.
48. Needham C, Durose M, Mangan C, Rees J. Evaluating co-production: pragmatic approaches to building the evidence base. For Co-production panel Political studies association conference, 14-16 April 2014, Manchester, UK. Birmingham: University of Birmingham 2014.
49. Bagnall A, *et al.* National Institute for Health and Care Excellence Primary Research Report 1: Community engagement – approaches to improve health: map of current practice based on a case study approach. 2016.

50. Durose C, *et al.* Generating 'good enough' evidence for co-production. *Evid Policy* 2015;13(1):135-151.
51. Kaner EF, *et al.* Effectiveness of brief alcohol interventions in primary care populations. *Cochrane Database Syst Rev* 2007; 2.
52. Madras BK, *et al.* Screening, brief interventions, referral to treatment (SBIRT) for illicit drug and alcohol use at multiple healthcare sites: comparison at intake and 6 months later. *Drug Alcohol Depend* 2009; 99(1-3): 280-95.
53. , The world health report 2002: reducing risks, promoting healthy life. World Health Organization 2002.
54. Winett RA A Framework for health promotion and disease prevention programmes *Am Psychol* May 1995;50(5): 341. <http://dx.doi.org/10.1037/0003-066X.50.5.341>
55. Fitzgerald N, *et al.* Large-scale implementation of alcohol brief interventions in new settings in Scotland: a qualitative interview study of a national programme. *BMC Public Health* 2015;15: 289.
56. Toumbourou JW, *et al.* Reduction of adolescent alcohol use through family-school intervention: a randomized trial. *J Adolesc Health* 2013; 53(6): 778-84.
57. Gatta M, *et al.* Focus Groups as a Means for Preventing Adolescent Alcohol Consumption: Qualitative and Process Analysis. *Journal of Groups in Addiction & Recovery* 2015; 10(1): 63-78.
58. Aira M, *et al.* Differences in brief interventions on excessive drinking and smoking by primary care physicians: qualitative study. *Prev Med* 2004; 38(4): 473-8.
59. Kaner E, T Rapley, C May Seeing through the glass darkly? A qualitative exploration of GPs' drinking and their alcohol intervention practices. *Fam Pract* 2006; 23(4): 481-7.
60. Lock CA, *et al.* Effectiveness of nurse-led brief alcohol intervention: a cluster randomized controlled trial. *Journal of advanced nursing* 2006; 54(4): 426-439.
61. Amaral M., Ronzani TM, Souza-Formigoni ML, Process evaluation of the implementation of a screening and brief intervention program for alcohol risk in primary health care: An experience in Brazil. *Drug Alcohol Rev* 2010; 29(2): 162-8.
62. Beich A, Gannik D, Malterud K. Screening and brief intervention for excessive alcohol use: qualitative interview study of the experiences of general practitioners. *BMJ* 2002;325(7369): 870.
63. Aalto M, P Pekuri, K Seppa, Obstacles to carrying out brief intervention for heavy drinkers in primary health care: a focus group study. *Drug Alcohol Rev* 2003; 22(2): 169-73.
64. Nygaard P OG Aasland. Barriers to implementing screening and brief interventions in general practice: findings from a qualitative study in Norway. *Alcohol Alcohol* 2011; 46(1): 52-60.
65. Anderson P, Baumberg B. Alcohol in Europe: a public health perspective 2006. London: *Institute of Alcohol Studies*. ISBN 92-79-02241-5.
66. Anderson C. The AAPPQ revisited: the measurement of general practitioners' attitudes to alcohol problems. *Br J Addiction* 1987; 82(7): 753-9.
67. Broyles LM, *et al.* A qualitative study of anticipated barriers and facilitators to the implementation of nursedelivered alcohol screening, brief intervention, and referral to treatment for hospitalized patients in a Veterans Affairs medical center. *Addict Sci Clin Pract* May 2012; 7.7. doi: 10.1186/1940-0640-7-7.
68. Lock CA, *et al.* A qualitative study of nurses' attitudes and practices regarding brief alcohol intervention in primary health care. *JAdv Nurs* 2002; 39(4): 333-342.
69. Johansson K, Akerlind I, Bendtsen P Under what circumstances are nurses willing to engage in brief alcohol interventions? A qualitative study from primary care in Sweden. *Addict Behav* 2005; 30(5): 1049-53.
70. Brownson RC, Jones E, Bridging the gap: translating research into policy and practice. *Prev Med* 2009; 49(4):. 313-5.

71. Cohen DJ, *et al.* Fidelity versus flexibility: translating evidence-based research into practice. *Am J Prev Med* 2008; 35(5 Suppl): S381-9.
72. Green LW Glasgow RE Evaluating the relevance, generalization, and applicability of research: issues in external validation and translation methodology. *Eval Health Prof* 2006; 29(1): 126-53.
73. Kok MO., *et al.* Practitioner opinions on health promotion interventions that work: opening the 'black box' of a linear evidence-based approach. *Soc Sci Med* 2012; 74(5): 715-23.